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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,032	04/08/2004	Daniel J. Miller	MSI-0640USC1	2257
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HUYNH, BA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,032

Applicant(s)

MILLER ET AL.

Examiner

Ba Huynh

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/08 has been entered.

Terminal Disclaimer

The terminal disclaimer filed on 8/1/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the patent has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

1. Claims 1-21, 37-39 are rejected under 35 U.S.C. 103 (a) as being unpatentable over US patent application publication 2002/0023103 (Gagne), in view of US patent #5,815,689 (Shaw et al).

- As for claims 1, 20, 21: Gagne teaches a multi-media processing method and corresponding apparatus comprising: providing multiple tracks (e.g., 44, 48, 52, 56) each of which being capable of being associated with one or more digital data streams (0059, 0062); and selectively representing the multiple tracks (52, 56) as a single track, i.e., the

meta clip 60 (0065-0073, figs 5). Filters are applied to the meta clip to create special effects (0079). While teaching filters, Gagne fails to clearly teach the implementation of the software-implemented matrix switch that is programmable to route multiple switch inputs to multiple switch outputs and at least two of the inputs being capable of competing for a single output during a common time period, the single output being configured to provide a data stream defined by the multi-media editing project. However in the same field of invention, Shaw teaches the implementation of the software implemented matrix switch (i.e., programmable filter matrix) that is programmable to route multiple switch inputs to multiple switch outputs and at least two of the inputs being capable of competing for a single output during a common time period (4:55-5:12, 8:65-9:6, 11:60-12:11, 27:50-60). It would have been obvious to one of skill in the art, at the time the invention was made, to combine Shaw's teaching of the programmable software implemented matrix switch to Gagne for processing the digital data associated with the single track (meta clip). Motivation of the combining is for the advantage of having the switch signal being dynamically re-assignable thus increasing performance and processing time. Implementation of the programmable matrix switch (programmable filter matrix) would reduce filter graph complexity and save memory resource. Reducing filter graph complexity in order to reduce computational and memory resource is also inherently included in Shaw since Shaw does not show any redundant unused filter. Further, simplify a design of a circuitry would have been one of the goal in designing to cut cost and computational. Non-combined overlapping tracks 44 and 48 are processed based on the source of the track as conventional.

- As for claims 2, 3, 4: The act of representing comprises representing at least one transition between at least two of the multiple tracks (0070).
- As for claims 5-7: The act of representing comprises representing at least one effect applied to at least one of the multiple tracks (0070).
- As for claims 8-10: The act of representing comprises representing at least one transition between at least two of the multiple tracks and at least one effect applied to at least one of the multiple tracks (0070, 0071).
- As for claims 11-13: The method further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks (0070).
- As for claims 14-16: The method further comprising operating upon said single track by applying at least one effect to at least one of the multiple tracks (0070, 0071).
- As for claims 17-19: The method further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks, and at least one effect to at least one of the multiple tracks (0070, 0071).
- As for claims 37, 39: Gagne teaches a computer implemented system comprising a data structure (meta-clip, 0064) embodied on a computer readable medium, the data structure comprising: one or more portions associated with at least one track of a multimedia editing project (0059, 0060), individual tracks being associated with one or more data stream sources (0059, 0060); and one or more portions associated with a composite, the composite comprising at least one track (0064, 0069). Filters are applied to the meta clip to create special effects (0079). While teaching filters, Gagne fails to clearly teach the implementation of the software-implemented matrix switch that is programmable to

route multiple switch inputs to multiple switch outputs and at least two of the inputs being capable of competing for a single output during a common time period, the single output being configured to provide a data stream defined by the multi-media editing project. However in the same field of invention, Shaw teaches the implementation of the software implemented matrix switch (i.e., programmable filter matrix) that is programmable to route multiple switch inputs to multiple switch outputs and at least two of the inputs being capable of competing for a single output during a common time period (4:55-5:12, 8:65-9:6, 11:60-12:11, 27:50-60). It would have been obvious to one of skill in the art, at the time the invention was made, to combine Shaw's teaching of the programmable software implemented matrix switch to Gagne for processing the digital data associated with the single track (meta clip). Motivation of the combining is for the advantage of having the switch signal being dynamically re-assignable thus increasing performance and processing time. The matrix switch being configured to support implementation of a cascaded architecture utilizing feedback path (21:54-56, 26:8-33). The data structure comprises a programming grid (Gagne's figs 8, 10) to couple one or more of a scalable plurality of input pins to a scalable plurality of output pins of the matrix switch filter (Shaw's 27:50-60).

- As for claim 38. Nested composite is disclosed by Gagne (figure 8).

2. Claims 22-36 are rejected under 35 U.S.C. 103 (a) as being unpatentable over US patent application publication 2002/0023103 (Gagne), in view of US patent #6,266,053 (French), further in view of US patent #5,815,689 (Shaw et al).

- As for claims 22, 35, 36: Gagne teaches a multi-media processing method and corresponding apparatus comprising: providing multiple tracks (e.g., 44, 48, 52, 54) each of which being capable of being associated with one or more digital data streams (0059, 0062); processing the non-combined overlapping tracks 44 and 48 based on a source of a tracks as conventional, representing the multiple tracks 52, 56 as a group upon which operations can be performed that do not affect tracks 44 and 48 that are not in the group (0065-0073, figs 5-11). A media project is a hierarchical structure of which the tracks comprise a part (a media project is a time-based hierarchy of media objects). Gagne fails to clearly teach that the hierarchy is a tree structure. However in the same field of invention, French teaches representing a media project as a tree structure. It would have been obvious to one of skill in the art, at the time the invention was made, to combine French's teaching of hierarchical tree structure representation of media object to Gagne. Motivation of the combining is for the advantage of having the ability to integrate a time context and time inheritance into a graph oriented media project, as expressly suggested by French in 6:15-24. The combine Gagne&French fails to clearly teach the implementation of the programmable software-implemented matrix switch for processing the digital data associated with the single track. However in the same field of invention, Shaw teaches the implementation of the programmable software implemented matrix switch (i.e., programmable filer switch) that is programmable to route multiple switch inputs to multiple switch output and at least two of the inputs being capable of competing for a single output during a common time period (4:55-5:12, 8:65-9:6, 11:60-12:11,

27:50-60). It would have been obvious to one of skill in the art, at the time the invention was made, to combine Shaw's teaching of the programmable software implemented matrix switch to Gagne for processing the digital data associated with the single track (meta clip). Motivation of the combining is for the advantage of having the switch signal being dynamically re-assignable thus increasing performance and processing time. Implementation of the programmable matrix switch (programmable filter matrix) would reduce filter graph complexity and save memory resource. Reducing filter graph complexity in order to reduce computational and memory resource is also inherently included in Shaw since Shaw does not show any redundant unused filter. Further, simplify a design of a circuitry would have been one of the goal in designing to cut cost and computational.

- As for claims 23-25. The method further comprising operating on said tracks using said particular set of operations (0070, 0071).
- As for claims 26-28. The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least an effect (0070, 0071).
- As for claims 29-31: The method further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least a transition (0070, 0071).
- As for claims 32-34. The method further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at

least an effect and a transition (0070, 0071).

Response to Arguments

Applicant's arguments filed 8/1/08 have been fully considered but they are not persuasive.

Remarks:

In response to the argument that the combined references do not teach processing overlapping tracks based on the source of the tracks if the multiple tracks have not been represented as a single track, Gagne teaches providing a plurality of tracks 44, 48, 52 and 56, selectively grouping tracks 52 and 56 into a single meta-track 60. The remains non-combined overlapping tracks 44 and 48 are processed based on the source of the tracks as normal (fig 5).

In response to the argument that the combined reference do not teach the step reducing filter graph complexity in order to reduce computational and memory resource, the steps is inherently included in Shaw since Shaw does not show any redundant unused filter. Further, simplify a design of a circuitry would have been one of the goal in designing to cut cost and computational.

The applicant argues that Gagne's meta-clip is not combinable to Shaw because Shaw teaches that each input instance is one of the same type and the filter may only support one type of input pin. In response to the argument, Shaw clearly teach a controlling agent 342 dynamically creates filters and pins for each type of data (39:57-4040), thus in view of the combined teaching, each data type in the meta-clip would be directed to appropriate filter and input pin. Since the language of the claims do not require how different data type of the single

track are connected to input pins of the matrix, the proposed combination of Gagne&Shaw does read on the claim as recited. In addition, Gagne is not limited to grouping of different data type to the meta-clip. One of skill in the art, in light of Gagne, would be able to group only data of the same type into a meta-clip. Note that the claims do not require that the single track comprises different digital data stream.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ba Huynh whose telephone number is (571) 272-4138. The examiner can normally be reached on Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Ba Huynh/

Primary Examiner, Art Unit 2179